

Comprehensive List of Consent Decree Limits

Description of the Refinery Air Permits	Canton	Catlettsburg	Detroit	Garyville	Robinson	Texas City
	Title V No. 15-76-00-0301 ; multiple PTIs	The Title V Air Permit ID No. #V-12-026	The Title V Air Permit ID No. MI-ROP-A9831-2012b	Title V - 2580-00013-V12	The Title V Air Permit ID No. 96010007	The Title V Air Permit ID No. O1380 and Flexible Permit No: 22433
Paragraph & Description	Limit					
¶12 - FCCU NOx Short-Term Limit (in ppm 7-day rolling average)	72 ppm - Permit P0103855, Page 14 of 22	50 ppm - V-12-026, Page 254 of 486 Section B.2.e.(3)	123 ppm - MI-ROP-A9831-2012b; EU11-FCCU-S1, Condition I.8. page 36 of 237	61 ppm - Permit #2580-00013-V12, Specific Requirements page 113 of 216, Condition 1447	74.2 ppm for partial burn and 95.6 ppm full burn* - CAAPP Permit #96010007 Modification Application, Provision 7.3.3.k.iii and PTI #12020050, 5/4/12, Pages 1&2, Condition 3.A.	40 ppm - Permit 22433, Special Condition 51, Page 23 of 38
¶12 - FCCU NOx Long-Term Limit (in ppm 365-day rolling average)	52 ppm - Permit P0103855, Page 14 of 22	30 ppm - V-12-026, Page 254 of 486 Section B.2.e.(3)	70 ppm - MI-ROP-A9831-2012b; EU11-FCCU-S1, Condition I.9. page 36 of 237	41 ppm - Permit #2580-00013-V12, Specific Requirements page 113 of 216, Condition 1447	54.2 ppm - CAAPP Permit #96010007 Modification Application, Provision 7.3.3.k.ii and PTI #12020050, 5/4/12, Pages 1&2, Condition 3.A.	20 ppm - Permit 22433, Special Condition 51, Page 23 of 38
¶12.J NOx CEM - CD required language	General NOx CEM Conditions - shall install, certify, calibrate, maintain & operate in accordance with requirements of 40 CFR 60.11, 60.13 and Part 60 Appendix A, the applicable performance specification test of 40 CFR Part 60 Appendies B and F. With respect to 40 CFR Part 60, Appendix F, in lieu of the requiements of 40 CFR Part 60 Appendix F 5.1.1, 5.1.3 and 5.1.4, MPC shall conduct either a Relative Accuracy Audit ("RAA") or a Relative Accuracy Test Audit ("RATA") once every twelve calendar quarters, provided that a Cylinder Gas Audit is conducted each calendar quarter.					
¶12.J NOx CEM - Location of language in permit	Permit P0103855, Pages 16 thru 18	V-12-026, Page 254 of 486 Section B.2.e (Compliance Demonstration Method b.)	MI-ROP-A9831-2012b, EU11-FCCU-S1, Condition VI.2., page 37 of 237	Permit #2580-00013-V12, Specific Requirements page 111 of 216, Condition 1425	CAAPP Permit #96010007 Modification Application, Provision 7.3.8.g and PTI #99020080, Page 9, Condition 8.a.iii	Permit 22433, Special Condition 25, Page 16 of 38
¶14 - FCCU SOx Short-Term Limit (in ppm 7-day rolling average)	90 ppm - Permit P0103855, Page 14 of 22	50 ppm - V-12-026, Page 254 of 486 Section B.2.e.(2)	70 ppm - MI-ROP-A9831-2012b, EU11-FCCU-S1, Condition I.5., page 35 of 237	50 ppm - Permit #2580-00013-V12, Specific Requirements page 111 of 216, Condition 1426	50 ppm - Permit #96010007, Provision 7.3.3.k, page 89 and PTI #99020080, Page 8, Condition 6.c.i	50 ppm - Permit 22433, Special Condition 50, Page 22 of 38
¶14 - FCCU SOx Long-Term Limit (in ppm 365-day rolling average)	45 ppm - Permit P0103855, Page 14 of 22	25 ppm - V-12-026, Page 254 of 486 Section B.2.e.(2)	35 ppm - MI-ROP-A9831-2012b, EU11-FCCU-S1, Condition I.6., page 36 of 237	25 ppm - Permit #2580-00013-V12, Specific Requirements page 111 of 216, Condition 1426	25 ppm - Permit #96010007, Provision 7.3.3.k, page 89 and PTI #99020080, Page 8, Condition 6.c.i	18 ppm - Permit 22433, Special Condition 50, Page 22 of 38
14.I SOx CEM Recommended Language	General SOx CEM Conditions - shall install, certify, calibrate, maintain & operate in accordance with requirements of 40 CFR 60.11, 60.13 and Part 60 Appendix A, the applicable performance specification test of 40 CFR Part 60 Appendies A and B. In lieu of the requirements of 40 CFR Part 60 Appendix F 5.1.1, 5.1.3 and 5.1.4, MPC shall conduct either a Relative Accuracy Audit ("RAA") or a Relative Accuracy Test Audit ("RATA") once every twelve calendar quarters, provided that a Cylinder Gas Audit is conducted each calendar quarter.					
14.I SOx CEM	Permit P0103855, Pages 16 thru 18	V-12-026, Page 254 of 486 Section B.2.e (Compliance Demonstration Method c.)	MI-ROP-A9831-2012b, EU11-FCCU-S1, Condition VI.2., page 37 of 237	Permit #2580-00013-V12, Specific Requirements page 111 of 216, Condition 1430	CAAPP Permit #96010007 Modification Application, Provision 7.3.8.c.iii and PTI #99020080, Page 9, Condition 8.a.ii	Permit 22433, Special Condition 25, Page 16 of 38
14.J - Hydrotreater Outage Plan Language	The 7-day FCCU SO2 emission limit shall not apply during periods of hydrotreater outages provided that Permittee is maintaining and operating the FCCUs including the associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions in accordance with an EPA approved Hydrotreater Outage Plan.					
14.J - Hydrotreater Outage Plan	P0105568, Page 15 of 21	V-12-026, Page 254 of 486 Section B.2.e.(1)	MI-ROP-A9831-2012b, EU11-FCCU-S1, Condition I. footnote to table., page 36 of 237	Permit #2580-00013-V12, Specific Requirements page 112 of 216, Condition 1444	NA - The Refinery does not have a Hydrotreating Unit.	NA - The Refinery does not have a Hydrotreating Unit.
¶16.A, App. I - SOx Limit (FCC NSPS J)	9.8 lb/ 1000 lb coke burn - Page 302 of Permit 15-76-00-0301	V-12-026, Page 253 of 486, Section B.2.d. Subpart J 50 ppmv limit.	Compliance with Subpart J/Ja; MI-ROP-A9831-2012b, EU11-FCCU-S1, Condition IX.1 page 39 of 237	50 ppm - Permit #2580-00013-V12, Specific Requirements page 116 of 216, Condition 1426. FCC is subject to Subpart Ja	50 ppm 7-day - Permit #96010007, Provision 7.3.3.g.iv.B.1 and B.4, pages 84-85 and PTI #99020080, Page 3, Condition 3.a.i.D.1	50 ppmv on 7-day rolling average - Permit #O1380, Page 46, and Permit 22433, Special Condition 50, Page 22 of 38
¶16.A, App. I - PM Limit (in X lbs per 1,000 lbs coke burn - 3 hr average)	0.9 lb/ 1000 lbs of coke burn. Permit P0103855, Page 14 of 22	1.0 lb/ 1000 lbs of coke burn - V-12-026, Page 253 of 486 Section B.2.a	0.8 lb/ 1000 lbs of coke burn - MI-ROP-A9831-2012b, EU11-FCCU-S1, Condition I.1, page 35 of 237	1.0 lb/ 1000 lbs of coke burn - Permit #2580-00013-V12, Specific Requirements page 113 of 216, Condition 1445. Refinery has accepted a limit of 0.6 lbs per 1000 lbs coke burn	1.0 lb/ 1000 lbs of coke - Permit #96010007, Provision 7.3.3.(g)(i), pages 84-85 and PTI #99020080, Page 2, Condition 3.a.i.A	1.0 lb/ 1000 lbs of coke burn - Permit #O1380, Page 46
¶16.A, App. I - CO Limit	500 ppm - P0103855, Page 15 of 22	500 ppm (1 hr avg) -V-12-026, Page 253 of 486 Section B.2.c.	500 ppm - 1 hr avg - MI-ROP-A9831-2012b, EU11-FCCU-S1, Condition I.3., page 35 of 237	500 ppm - Permit #2580-00013-V12, Specific Requirements page 111 of 216, Condition 1427	500 ppm - Permit #96010007, Provision 7.3.3.g.iii, Page 84 and PTI #99020080, Page 2, Condition 3.a.i.C	FCC NSPS J - Carbon Monoxide limit 500 ppm, Permit #O1380, Page 47
¶16.A, App. I - CO CEM	Permit P0103855, Pages 16 thru 18	V-12-026, Page 253 of 486 Section B.2.c Compliance Demonstration Method	MI-ROP-A9831-2012b, EU11-FCCU-S1, Condition VI.2., page 37 of 237	Permit #2580-00013-V12, Specific Requirements page 111 of 216, Condition 1428	CAAPP Permit #96010007 Modification Application, Provision 7.3.8.g, and PTI #99020080, Page 9, Condition 8.a.i	Permit 22433, Special Condition 25, Page 16 of 38
How is compliance measured?	NOx, O2, SOx, CO & Opacity is by CEM. FCC Particulate Matter is by Stack Test.	NOx, O2, SOx, CO & Oacity is by CEM. FCC Particulate Matter is by Stack Test.	NOx, O2, SOx, CO & Opacity is by CEM. FCC Particulate Matter is by Annual Stack Test. MI-ROP-A9831-2012b, EU11-FCCU-S1, Conditions V.1. and VI., pages 37-38 of 237	NOx, O2, SOx, & CO is by a CEM and the Opacity is by AMP. FCC Particulate Matter is by Stack Test.	NOx, O2, SOx, & CO is by a CEM and the Opacity is by AMP. FCC Particulate Matter is by Stack Test.	NOx, O2, SOx, & CO is by a CEM and the Opacity is by AMP. FCC Particulate Matter is by Stack Test.

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Description of the Refinery Air Permits	Canton	Catlettsburg	Detroit	Garyville	Robinson	Texas City
	Title V No. 15-76-00-0301 ; multiple PTIs	The Title V Air Permit ID No. #V-12-026	The Title V Air Permit ID No. MI-ROP-A9831-2012b	Title V - 2580-00013-V12	The Title V Air Permit ID No. 96010007	The Title V Air Permit ID No. O1380 and Flexible Permit No: 22433
Paragraph & Description	Limit					
Heaters and Boilers - Emission Limits and Monitoring Requirements from Paragraphs 13, 15 and Appendices G & H						
¶13 - Individually Listed Heaters and Boilers	CCR Chg Heater (4-33-B-1 thru 4) - 0.045 NOx lbs / mmbtu - Permit P0103854, Pages 36 of 42	Sat Gas Heater (2-30-B-1) - 0.050 lbs NOx / mmbtu and 39 tpy of NOx emissions - V-12-026, Page 128 of 486 Section B.2.b.1 & 3	Crude Alcorn (EU05) & Vacuum Heater (EU04) (Common Stack S1) - 0.050 lbs NOx / mmbtu, MI-ROP-A9831-2012b, Condition 1.1 & 2., page 99 of 237 and 82 tpy of NOx emissions, Condition 1.13, page 100 of 237	Crude Atmospheric Heater (10-1401) - 0.065 lbs NOx / mmBTU - 2580-00013-V12, Specific Requirements page 93 of 216, Condition 1229. H2S Limit is on page 93 of 216, Condition 1220 and the NOx CEM requirements are in Condition 1229	Crude Atm Heater (1F-1) - 0.0138 lbs NOx / mmBTU and 32 tpy of NOx emissions - PTI #01090064, Pages 4-5, Condition 1.1.6.a & c	#5 Topper (05-H-3) - 35.87 tpy of NOx emissions (and a firing rate limit of 182 mmBTU/hr) - PTI #22433, Special Condition 52, pg 23. The NOx CEM Requirements are also found on page 23 Special Condition 52
	Crude Heater (4-0-B-6) - 0.045 NOx lbs / mmbtu - Permit P0103854, Pages 14 of 42	No. 3 Crude Heater (2-23-B-3) - 0.055 lbs NOx / mmbtu and 43 tpy NOx emissions - V-12-026, Page 125 of 486, Section B.2.b.1 & 3		Crude Atmospheric Heater (10-1402) - 0.065 lbs NOx / mmBTU - 2580-00013-V12, Specific Requirements page 94 of 216, Condition 1240. H2S Limit is Condition 1230 and the NOx CEM requirements are in Condition 1240	HF Alky Isostripper (7F-1) - 0.030 lbs NOx/mmBTU and 20 tpy of NOx emissions CAAPP Permit #96010007 Modification Application, Provision 7.1.5.c.iv, Provision 7.1.6.a.iv, and Draft PTI #10120007, 1/31/13, Condition 2.c.ii.A	
		No. 3 Crude Heater (2-23-B-4) - 0.055 lbs NOx / mmbtu and 43 tpy NOx emissions - V-12-026, Page 125 of 486, Section B.2.b1a & 3		Hf Alky Isostripper Reboiler (27 - 1401 & 1402) - 0.040 lbs NOx / mmBTU - Permit #2580-00013-V12, Specific Requirements Page 110 of 216, condition 1423. H2S Limit is condition 1414 and the NOx CEM requirements are in Condition 1423	Ultraformer Reactor Preheater (3F-1) - 0.12 lbs NOx / mmBTU and 96 tpy of NOx emissions - CAAPP Permit #96010007 Modification Application, Provisions 7.1.5.c.v & 7.1.6.a.i and PTI #99020080, page 8, Condition 6.a.i & iii	
		VGO Rx Chg Heater (2-104-B-1) - 0.05 lbs NOx / mmbtu and 22 tpy NOx emissions - V-12-026, Page 137 of 486, Section B.2.b.1 & 2		FCC Charge Heater (25 - 1401) - 0.035 lbs NOx / mmBTU - Permit #2580-00013-V12, Page 109 of 216, Condition 1412. H2S Limit is Condition 1395 and the NOx CEM requirements are on page 109, Condition 1412.	Ultraformer Reactor Preheater (3F-2) - 0.12 lbs NOx / mmBTU and 63 tpy of NOx emissions - CAAPP Permit #96010007 Modification Application, Provisions 7.1.5.c.v & 7.1.6.a.i and PTI #99020080, page 8, Condition 6.a.i & iii	
		VGO Rx Chg Heater (2-104-B-2) - 0.05 lbs NOx / mmbtu and 22 tpy NOx emissions - V-12-026, Page 137 of 486, Section B.2.b.1 & 2		Crude Vaccum Heater (10 - 1403) - 0.030 lbs NOx / mmBTU - Permit #2580-00013-V12, Specific Requirements Page 96 of 216, Condition 1254. H2S Limit is Condition 1242 and the NOx CEM requirements are on page 96, Condition 1254		
		HPCCR Rx Chg Htrs (2-102-B-1A, B & C; 3 heaters with one stack) - 0.045 lbs NOx / mmbtu and 89 tpy of NOx emissions - V-12-026, Page 137 of 486, Section B.2.a.1 & 2.		Distillate Hydrotreater Reactor Charge Heater (14-1401) - 0.040 lbs NOx / mmBTU - Permit #2580-00013-V12, Specific Requirements Page 101 of 216, Condition 1314. H2S Limit is Condition 1302 and the NOx CEM requirements are Condition 1314		
¶13.H.i Heater NOx CEM(s) Language	General NOx CEM Conditions - certify, calibrate, maintain & operate in accordance with requirements of 40 CFR 60.11, 60.13 and part 60 Appendix A, the applicable performance specification test of 40 CFR Part 60 Appendices B and F. With respect to 40 CFR Part 60, Appendix F, in lieu of the requirements of 40 CFR Part 60 Appendix F 5.1.1, 5.1.3 and 5.1.4, MPC shall conduct either a Relative Accuracy Audit ("RAA") or a Relative Accuracy Test Audit ("RATA") once every twelve calendar quarrrters, provided that a Cylinder Gas Audit is conducted each calendar quarter.					
¶13.H.i Heater NOx CEM(s)	P0103854, Pages 17 & 38 of 42	V-12-026, Page 144 of 486, Section B.4.a	MI-ROP-A9831-2012b, FGHEATERS-S1, Condition VI.9., page 103 of 237	The Heater NOx CEM language is specific to each heater listed above. See the individual page numbers and conditions above	CAAPP Permit #96010007 Modification Application, Provision 7.1.8.c, and Individual conditions for each heater - 3F-1&2 - PTI #99020080 Condition 8.b; 1-F1 - PTI #01090064 Condition 1.1.b.i; 7-F1 - Draft PTI #10120007 Condition 2.c.ii.	The NOx CEM Requirements are found in PTI #22433, page 23 Special Condition 52

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Paragraph & Description	Limit					
¶13.L Heater NOx					Install ultra-low NOx burners on the Regular Coker Heater [90-F-41] - PTI #10120022, Condition 2.1.3.b.ii.B	
¶15.A & Appndx. G - No Fuel Oil Burning	P0103854, Page 15 of 42	V-12-026, Page 81 of 486, Section B.1a	Fuel Gas Only - MI-ROP-A9831-2012b, FGHEATERS-S1, Condition III.13., page 101 of 237; EU27-ZURNBOILER-S1, Condition III.1, Page 52 of 237; EU27-B&WBOILER1-S1, Condition III.1, Page 55 of 237	NA - Garyville was never permitted to burn fuel oil	Draft PTI #10120007, page 2, Condition 2.b	Permit 22433, Special Condition 53, Page 23 of 38
¶15.B - Hydrogen Sulfide limit for a 3 hour rolling average	162 ppm - P0103854, Page 14 of 42	<0.10 gridsctf - V-12-026, Page 137 of 486, Section B.1.b.	162 ppm - MI-ROP-A9831-2012b, FGHEATERS-S1, Condition II.1., page 100 of 237	162 ppm - Permit #2580-00013-V12, listed on multiple pages as a condition for each heater. See citations above	NSPS Subpart J - CAAPP #96010007, Provision 7.1.3.b, page 41 and Draft PTI #10120007, page 2.a.i	Compliance with Subpart J, Special Condition 54, Page 23
Appendix H - Subpart J Compliance for Heaters & Boilers (AMPs)		AMP (required by 9/01/01) - Caustic Oxidizer Off-Gas - applies to HRU Boilers - Relying on the inherently low provisions V-12-026, Page 91 of 486, section B4.c.4.iv and section B4.e.1-5	AMP (required by 09/01/01)- Disulfide Gas from Merox Unit - applies to the FCC Chg Heater 11-H-1 - MI-ROP-A9831-2012b, EU21-S2OFFGAS-S1, Condition II.1., page 44 of 237.	AMP (required by 09/07/00)- Disulfide Gas from LPG Merox - applies to the FCC Charge Heater - Permit #2580-00013-V12, Page 108 of 216 Specific Requirement 1396.		
		AMP (required by 09/01/01) - Lock Hopper Gas from CCR - applies to HPCCR Chg Heaters 2-102-B-1A, 1B & 1C --Relying on the inherently low provisions V-12-026 Draft, Page 91 of 486, section B4.c.4.iii	AMP (required by 02/04/02) - De-Ethanizer Off Gas stream in Alky Unit - applies to Heaters fed by Refinery Fuel Gas Header - MI-ROP-A9831-2012b, FGHEATERS-S1, Condition VI.10., page 103 of 237. (The stream has since been re-routed into the fuel drum and is analyzed with a CEMs. MPC has requested to withdraw the AMP now that monitoring is performed by CEMs.)	AMP (required by 09/07/00)- Disulfide Gas from C3/C4 Merox - applies to the Sat Gas Heater 92-80 - Permit #2580-00013-V12, Page 114 of 216 Specific Requirement 1462.		
		AMP (required by 09/01/01) - Lock Hopper Gas from CCR - applies to LPCCR Chg Heaters 1-44-B-1 & 2 --Relying on the inherently low provisions V-12-026, Page 91 of 486, section B4.c.4.iii	AMP (required by 02/04/02) - Propylene De-Ethanizer Off Gas stream in Refinery Fuel Gas - applies to Heaters fed by Refinery Fuel Gas Header - MI-ROP-A9831-2012b, FGHEATERS-S1, Condition VI.11., page 103 of 237. (The stream has since been re-routed into the fuel drum and is analyzed with a CEMs. MPC has requested to withdraw the AMP now that monitoring is performed by CEMs.)	AMP (required by 09/07/00)- Lock Hopper Gas from CCR- applies to the Platformer Charge Heater - Permit #2580-00013-V12, Page 113 of 216 Specific Requirement 1452		
		AMP (required by 09/01/01)- Disulfide Gas from Merox Unit - applies to the Sat Gas Heater 2-30-B-1 - Relying on the inherently low provisions V-12-026, Page 91 of 486, section B4.c.4.iv and section B4.e.1-5	AMP (required by 12/31/05) - Lock Hopper Vent Gas from CCR - AMP not necessary because stream is inherently low in sulfur content, 40 CFR 60.103(a)(4)(iv)(c)	AMP (required by 10/01/01)- Disulfide Gas - applies to the Coker Heater - Permit #2580-00013-V12, Page 120 of 216, Specific Requirement 1528		

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Paragraph & Description	Limit					
			AMP (required by 12/31/05) - CCR Chlorosorb Regenerator Vent Gas - applies to CCR Charge Heaters - MI-ROP-A9831-2012b, FGHEATERS-S1, Condition VI.12., page 103 of 237. (MRD has since determined that monitoring is not required because the stream is inherently low in sulfur content. 40 CFR 60.103(a)(4)(iv)(C). MRD has requested withdraw of this AMP.)			
Sulfur Recovery Units - Emission Limits and Monitoring Requirements from Paragraphs 21 and 22						
21.A - Sulfur Pit Controls	Permit P0112479, Page 18 of 29	V-12-026, Page 267 and 268 of 486, Section B.1.c & d and Section B.1.g	MI-ROP-A9831-2012b, FG42-43SULRECOV-S1, Condition III.9., page 80 of 237	Permit #2580-00013-V12, Specific Requirements page 176 of 216, Condition 2267 and Specific Conditions, Permit Page 58, Item #8.	Draft Permit 10120007, Condition 3.a.	Permit 22433, Special Condition 36, Page 20 of 38
21.C - Sulfur Shedding	Permit P0112479, Page 17 of 29	V-12-026, Page 267 of 486, Section B.1. f	MI-ROP-A9831-2012b, FG42-43SULRECOV-S1, Condition III.10., page 80 of 237	Permit #2580-00013-V12, Part 70 Specific Conditions, Permit Page 58, Item #7.	Draft Permit 10120007, Condition 3.b.	Permit 22433, Special Condition 57, Page 26 of 38
21.e - TG Flaring Root Cause Analysis	Permit P0112479, Page 17-18 of 29	V-12-026, Page 34 of 486 Section B.1.d(1)(4)	MI-ROP-A9831-2012b, FGFLARES-S1, Condition III.9-13, pages 107-108 of 237	Permit #2580-00013-V12, Part 70 Specific Conditions, Permit Pages 58 & 59, Item #9. Also definitions on Pages 61 & 62.	Draft Permit 10120007, Condition 4	Permit 22433, Special Condition 56, Page 24 of 38
22 - AG Flaring Root Cause Analysis	Permit P0112479, Page 17-18 of 29	V-12-026, Page 34 of 486 Section B.1.d(1)(4)	MI-ROP-A9831-2012b, FGFLARES-S1, Condition III.9-13, pages 107-108 of 237	Permit #2580-00013-V12, Part 70 Specific Conditions, Permit Pages 58 & 59, Item #9. Also definitions on Pages 61 & 62.	Draft Permit 10120007, Condition 4	Permit 22433, Special Condition 56, Page 24 of 38
21 - Sulfur Dioxide limit in ppm for a 12 hour rolling average	250 ppm - 15-76-00-0301, P011 Page 2 & 3	250 ppm -V-12-026, Page 269 of 486, Section B.2.a.	250 ppm - MI-ROP-A9831-2012b, FG42-43SULRECOV-S1, Condition I.1., page 78 of 237	250 ppm - Permit 2580-00013-V12, SRU TO #1 Specific Requirements Page 102 of 215, Condition 1330.SRU TO #2 Page 104 of 215, Condition 1355, SRU TO #3 Page 118 of 215, Condition 1526	250 ppm - CAAPP Permit #96010007, Provision 7.8.3.d, Pages 129-130 and PTI #03030085, page 3, Condition 1.1.3.d.ii	250 ppm - Permit 22433, Special Condition 34, Page 19 of 38
Flare Systems - Emission Limits and Monitoring Requirements from Paragraphs 17 and Appendix J						
¶17- Hydrocarbon Flaring Root Cause Analysis	Permit P0112479, Page 17-18 of 29	V-12-026, Page 34 of 486 Section B.1.d(1)(4)	MI-ROP-A9831-2012b, FGFLARES-S1, Condition III.9-13, pages 107-108 of 237	Permit #2580-00013-V12, Part 70 Specific Conditions, Permit Pages 58 & 59, Item #9. Also definitions on Pages 61 & 62.	Draft Permit 10120007, Condition 4	Permit 22433, Special Condition 56, Page 24 of 38
¶17 - NSPS Subpart J - Applicability as fuel combustion device	Permit P0113530, Page 35 of 42	V-12-026, Page 32 of 486 Applicable Regulatins	MI-ROP-A9831-2012b, FGFLARES-S1, Condition IX.2., page 111 of 237	Permit No. 2580-00013-V12, Page 106 (South Flare) and Page 108 (North Flare) of 216, Specific Requirements 1364 and 1390	CAAPP Permit #96010007, Provision 7.7.12.d, page 127 and PTI 10020043, Condition 1.4.b	Permit 22433, Special Condition 54, Page 23 of 38
Appendix J - Subpart J Compliance for Flares (AMPs)	The Flare Consent Decree between US EPA and MPC entered by the Court on August 31, 2012, provides MPC with a schedule to meet compliance with Subpart J or Ja, whichever is applicable, at MPC's Refinery Flares in year 2016. During implementation of the Flare Consent Decree, MPC is required to install and operate monitoring systems, including flow meters and gas chromatographs on its flares. The requirements of the Flare Consent Decree have superseded the monitoring requirements of the November 2005 First Revised Consent Decree.					
Plant Wide - Emission Limits and Monitoring Requirements from Paragraph 26						
¶26 - Special Plant Wide conditions						SO2 Limit - 876 tpy - Installation of the Sulfur Recovery Unit was completed and the limit no longer applies

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Paragraph & Description	Limit					
¶26.1 - Netting Prohibition	Permit P0112475, Page 12 of 32	V-12-026, Page 468 of 486 Section D.5.	MI-ROP-A9831-2012b; EU11-FCCU-S1, Condition IX.12, page 40 of 237	Permit #2580-00013-V12, Part 70 Specific Conditions, Permit Page 59, Item #11.	Draft Permit 10120007, Condition 5.b.	N/A - all projects occurred past five-year lookback period
Description of the Refinery Air Permits	The current operating permit for the Canton Refinery was issued by the State of Ohio Environmental Protection Agency (OEPA) on January 23, 2004. The Title V Air Permit is identified by the facility ID number, 15-76-00-0301 . This Title V permit expired as of February 13, 2009, and Title V renewal applications were submitted to OEPA on July 31, 2008, March 11, 2009 and January 3, 2013.	The current operating permit for the Catlettsburg Refinery was issued by the Kentucky Department for Environmental Protection - Division for Air Quality on January 1, 2014. The Title V Air Permit is identified as V-12-026 . Kentucky is a consolidated permits program.	The current operating permit for the Detroit Refinery was issued by the Michigan Department of Environmental Quality (MDEQ) on September 27, 2012, and revised May 20, 2013, and January 16, 2014. The Renewable Operating Permit (ROP) is identified as Permit No. MI-ROP-A9831-2012b .	The operating permit for the Garyville Refinery is issued by the Louisiana Department of Environmental Quality (LDEQ). LDEQ has a consolidated permits program. The current version of the operating permit is No. 2580-00013-V12. LDEQ recently issued a draft permit No. 2580-00013-V13 for miscellaneous projects at the refinery. Additionally, on April 30, 2014, MPC submitted a PSD application for an expansion project at the refinery.	The Clean Air Act Permit Program (CAAPP) Permit No. 96010007 for the Robinson Refinery was issued by the Illinois Environmental Protection Agency on November 24, 2003. The permit expired on November 24, 2008, and a permit renewal application was timely submitted on December 18, 2007. A minor modification application was also submitted on December 31, 2008, requesting to incorporate provisions of the Consent Decree into the CAAPP permit. The renewal permit has never been issued final. MPC has submitted an application to revise the Permit to Install 10120007 to incorporate remaining provisions of the Consent Decree. IEPA has shared a draft of the PTI with MPC. Once IEPA has issued the final PTI, MPC will submit it to US EPA.	The current Flexible Permit No. 22433 was issued by the Texas Commission for Environmental Quality (TCEQ) on November 25, 2013.